

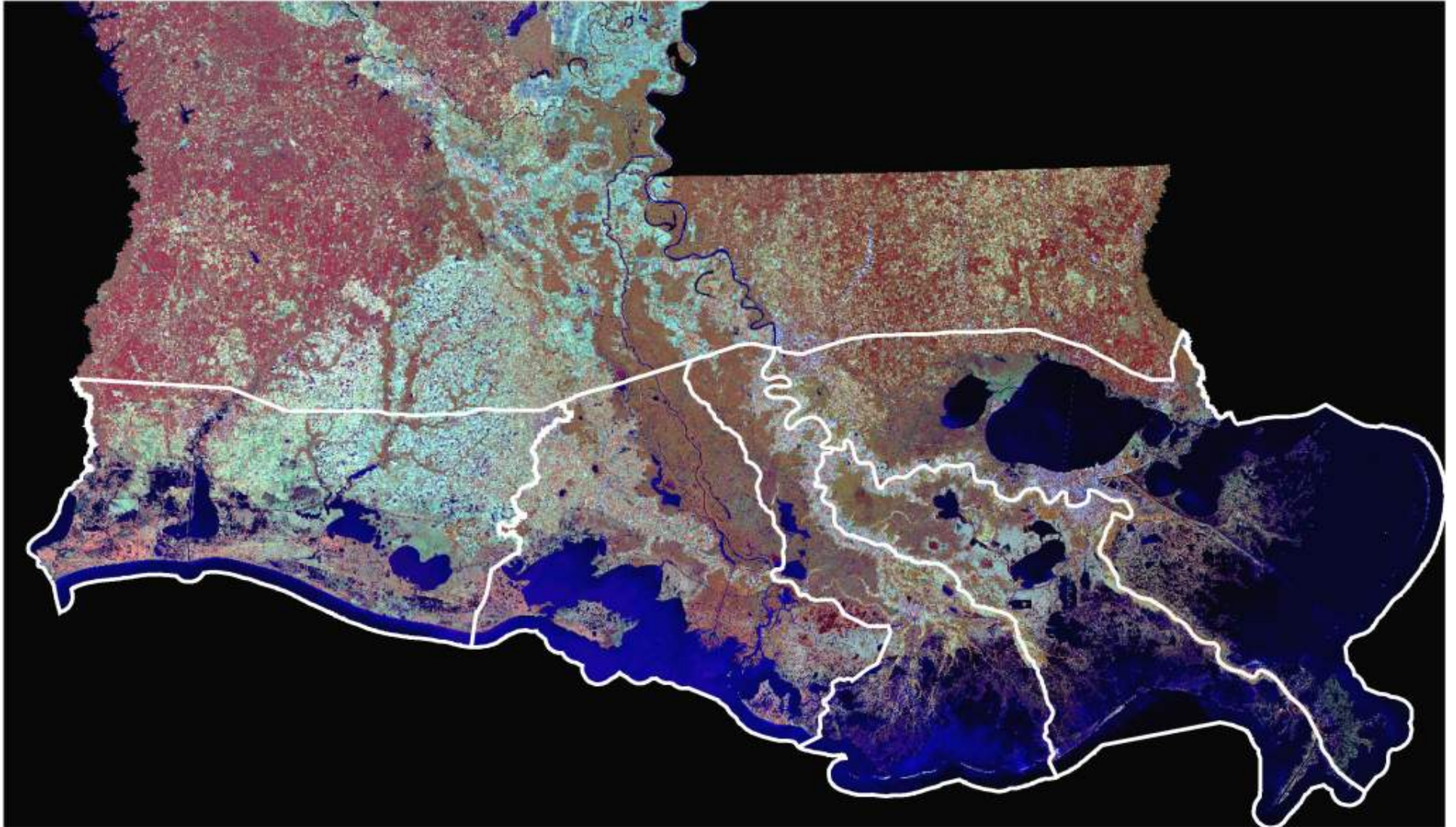
LA Coastal Protection and Restoration (LACPR)

- **Project area(s)**
- **Congressional Direction**
- **Schedule**
- **Report Development**
- **Planning and Design Workshops**
- **Special Considerations**
- **Communications**

**Wastewater Treatment Plant
Orleans Parish, LA**

Coastal Louisiana

- World's largest port complex
- Seafood connection
- Half of state's population
- Domestic energy hub
- 9,300 miles of pipelines
- Tied to 50% of refining capacity
- Historic and cultural significance
- Ecological engine of Gulf coast



Hurricanes Katrina and Rita

- Damages exceed \$150 billion
- More than 1,400 deaths
- Over 200,000 structures damaged or destroyed
- ~440,000 residents displaced
- 217 square miles of coastal wetlands destroyed



Congressional Direction

- Authorization and appropriation language included in three laws
 - Energy and Water Development Appropriations Act, 2006 (P.L. 109-103), 19 November 2005
 - Department of Defense Appropriations Act, 2006 (P.L. 109-148), 30 December 2005
 - Emergency Supplemental Appropriations for Defense, GWOT, and Hurricane Recovery (P.L. 109-234), 15 July 2006 (MRGO specific)

Fort Pike at The Rigolets
Orleans Parish, LA

Department of Defense Appropriations Act, 2006 (P.L. 109-148)

SEC. 5009. Public Law 109-103 amended as follows...

- **...Chief of Engineers, is directed to conduct a comprehensive hurricane protection analysis and design at full federal expense to develop and present a full range of flood control, coastal restoration, and hurricane protection measures exclusive of normal policy considerations...**
- **...submit a preliminary technical report for comprehensive Category 5 protection within 6 months...**
- **...submit a final technical report for Category 5 protection within 24 months**
- **...consider providing protection for a storm surge equivalent to a Category 5 hurricane within the project area and may submit reports on component areas of the larger protection program for authorization as soon as practicable...**
- **...analysis shall be conducted in close coordination with the State of Louisiana and its appropriate agencies.**

Schedule for Reports to Congress

- Preliminary Technical Report due to Congress in six months (complete)
- Final Technical Report due to Congress in twenty-four months (December 2007)
- MRGO-3D integrated into LACPR (December 2007)

Southwest Pass
Mouth of MS River

Report Development

- **Coordination with State of Louisiana**
- **Assembly of Project Delivery Team**
 - **Corps of Engineers and other Federal agencies**
 - **State agencies**
 - **Levee boards**
 - **Academic researchers**
 - **International managers and scientists**
 - **stakeholders**
- **Workshops**
- **Modeling**
- **Public involvement**
- **Engineering and Design**
- **Coastal restoration planning**
- **Report to Congress**

Team Composition

- USACE-MVN, USACE-MVD, USACE-ERDC, multiple districts, USACE-HQ, ASA(CW)
- USACE Planning Centers of Expertise
- State of Louisiana, Coastal Protection and Restoration Authority, LDNR, LDOTD, LDWF, LDEQ
- LSU, UNO, Tulane, Notre Dame, Univ North Carolina, Univ Maryland, Univ Delaware, Mass Inst Tech
- NOAA Hurricane Center, EPA, NMFS, USFWS, USGS, NRCS
- Dutch Rijkswaterstaat
- Oceanweather, Group Solutions, URS, HDR, and other firms

Stakeholder Coordination

- State of Louisiana
 - CPRA
 - LDNR
 - LDOTD
 - LDWF
 - LDEQ
- Levee Boards
- All coastal parishes
- Parishes Against Coastal Erosion
- Federal agencies
- Ports
- Industrial groups
- NO Sewerage and Water Board
- Drainage districts
- Civic associations
- Coastal zone advisory committees
- Barataria-Terrebonne National Estuary Program
- Coalition to Restore Coastal Louisiana
- Lake Pontchartrain Basin Foundation
- State of Mississippi

Planning Considerations

- **Defining Category 5 storm – what is the upper limit?**
- **Future without project conditions**
 - Level of recovery in impacted parishes
 - Continued coastal erosion and wetlands losses
- **Unintended consequences**
- **Coordination with other local, state and Federal projects (i.e., SELA, Morganza, etc...)**
 - Congressionally directed hurricane protection study for coastal Mississippi

Verret-Caernarvon Levee
St. Bernard Parish, LA

Planning and Design Workshops

- **Wind, Waves and Water (Dec 2005 Vicksburg, MS)**
 - Held to develop state of the science for estimating maximum hurricane for design comparison and analysis
 - Included National Hurricane Center, LSU and Dutch
- **Initial Plan Formulation (Feb 2006 Lafayette, LA)**
 - Assembly of coastal professionals to develop set of three initial alternative alignments for model runs and public presentation at scoping meetings
- **Engineering Technical Approaches and Innovations (Mar 2006 Vicksburg, MS)**
 - Experts in various design fields to assess alternatives and apply both standard and innovative approaches to assist the team in preparation of information gathering plans and tools for analysis

Initial Policy Guidance

- Issued January 2006
- Vertical team reporting
- Fully integrated into coastal restoration
- Coordinated with MSCIP study
- Technical review – independent and external
- Range of storms
- Structural and non-structural plans
- No NED/NER evaluation
- Collaborative planning

Independent Review Teams

EC-1105-2-408
Peer Review of Decision Documents

Technical Review

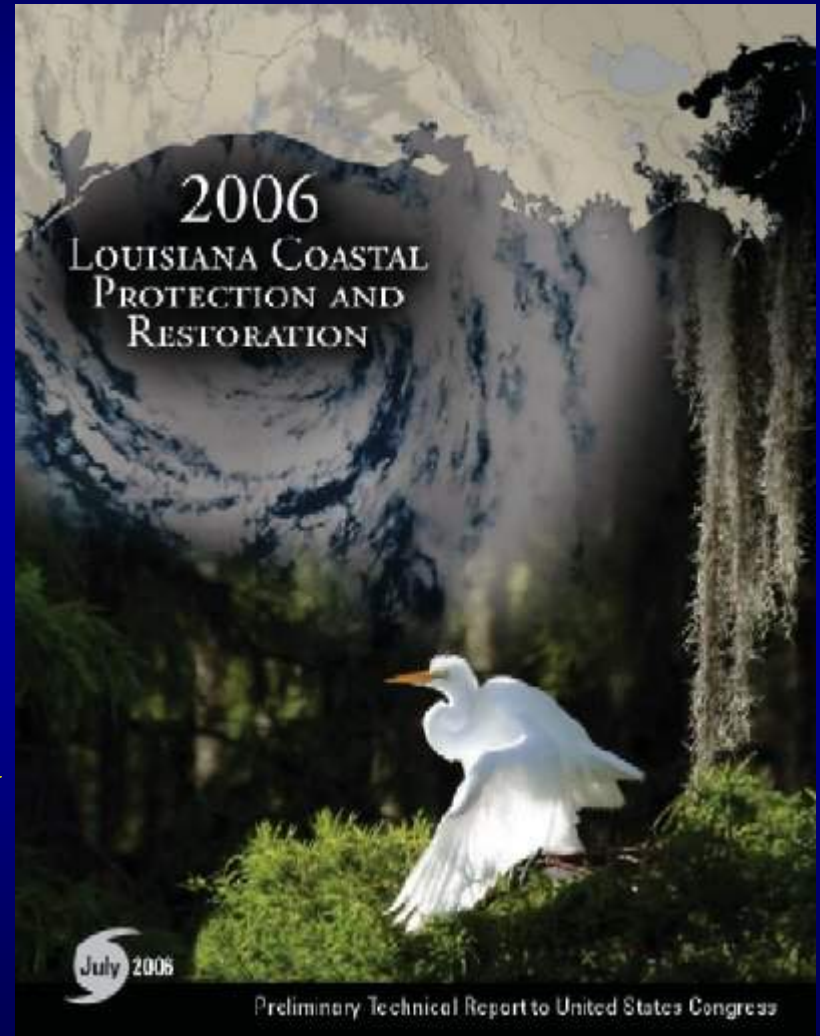
- Occurs within USACE outside of MVN/PDT
- Employs USACE Centers of Expertise (NAD lead through Hurricane & Storm Damage Reduction)
- Embedded technical managers and reviewers on PDT for continuous input

Peer Review

- Conducted outside of USACE
- PTR employed contract to establish a blind review process
- Final report will be vetted through National Academy of Sciences

Preliminary Technical Report

- Report completed in July 2006
- Outlines strategic approach
- Identifies key components
- Highlights remaining work needed to develop full plan



Supplemental Policy Guidance

- Issued August 2006
- Risk analysis and decision framework
- IPET
- Storm intensities to be evaluated
- Divide coast into planning units
- Range of potential recommendation
- MRGO integration

Completing the Final Technical Report to Congress

- Storm surge simulation models
- Estimating damage potentials
- Identifying alternative plans and designs
 - Coastal Restoration features
 - Non-structural measures
 - Structural
- Performing risk planning evaluations
- Estimating costs
- Public involvement
- Independent Technical Review
- External Peer Review
- Administration review

Stone Island
Breton Sound, LA



QUESTIONS?

www.lacpr.usace.army.mil

SW Pass Light
MS River delta



MRGO Deep Draft Deauthorization Study Authorization

Public Law 109-234, the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006

- **Develop a comprehensive plan to de-authorize deep draft navigation on the MRGO.**
- **Funds available \$3,300,000 (full Federal expense).**
- **Submit interim report to Congress no later than 15 December 2006.**
- **Refine the plan if necessary to be fully consistent with the Final Technical Report for the LACPR Plan.**

Conference Report

- **Include recommended modifications to the existing authorized navigation uses of the MRGO and any navigation uses that should be maintained.**
- **Identify measures for hurricane and storm protection.**
- **Develop the plan in consultation with St. Bernard Parish, State of Louisiana, and affected Federal agencies.**

Preliminary Technical Report

PRIME POINTS IN PRELIMINARY REPORT

- Coastal Features and Storm Surge
- Hurricane Threat to New Orleans
- Technical Collaboration with the Dutch
- Strong Houses Resist Storms
- Coastal Engineering Design Challenges